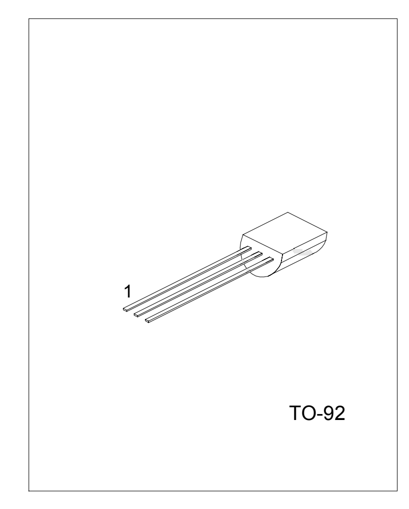
UTC 2SC1815 NPN EPITAXIAL SILICON TRANSISTOR

AUDIO FREQUENCY AMPLIFIER
HIGH FREQUENCY OSC NPN
TRANSISTOR

FEATURES

*Collector-Emitter voltage:
BV_{CEO}=50V
*Collector current up to 150mA
* High hFE linearity
*complimentary to 2SA1015



1:EMITTER 2:COLLECTOR 3. BASE

ABSOLUTE MAXIMUM RATINGS (Ta=25°C ,unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	60	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	5	V
Collector dissipation(Ta=25°C)	Pc	400	mW
Collector current	Ic	150	mA
Base current	I_B	50	mA
Junction Temperature	T_j	125	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS(Ta=25°C,unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector cut-off current	I_{CBO}	V_{CB}=60V,I_E=0			100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,Ic=0			100	nA
DC current gain(note)	h_{FE1} h_{FE2}	V_{CE}=6V,Ic=2mA V_{CE}=6V,Ic=150mA	70 25		700	
Collector-emitter saturation voltage	V_{CE}(sat)	Ic=100mA,I_B=10mA		0.1	0.25	V
Base-emitter saturation voltage	V_{BE}(sat)	Ic=100mA,I_B=10mA			1.0	V
Current gain bandwidth product	f_T	V_{CE}=10V,Ic=50mA	80			MHz
Output capacitance	Cob	V_{CB}=10V,I_E=0,f=1MHz		2.0	3.0	pF
Noise Figure	NF	Ic=-0.1mA,V_{CE}=6V R_G=10kΩ,f=100Hz		1.0	1.0	dB

CLASSIFICATION OF hFE1

RANK	Y	G	L
RANGE	120-240	200-400	350-700

TYPICAL CHARACTERISTIC CURVES

